# The Ethical Risks of Generative AI in Education (GenAIED) (Poster)

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# הסכנות האתיות של שימוש בבינה מלאכותית יוצרת בחינוך (פוסטר)

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### **Abstract**

A significant improvement in capability has been made in the field of generative AI over the past two years. Specifically, the advanced large language model ChatGPT, launched in November 2022, attracts global attention. While printed books took over 50 years to become widely available across Europe, ChatGPT reached 100 million users in just two months, followed by many other generative AI platforms.

Artificial Intelligence Ethics refers to the ethical issues arising from the development and deployment of AI technologies. It involves examining AI systems' social, legal, and ethical implications and their impact on individuals, society, the environment, and a wider public focus (Floridi, 2019; Jobin et al., 2019; Nguyen et al., 2023). AI in Education (AIED) ethics concerns questions about liability, data privacy, algorithmic bias, equitable technology access, the impact on teacher-student relationships, the potential for misinformation, the implications of learning analytics, and transparency in decision-making (Holmes et al., 2021; Schiff & Rosenberg-Kima, 2023).

While the ethical risks of AI have been widely discussed, the ethical risks of generative AI are just starting to emerge and are raising major concerns. Thousands signed the open letter "Pause Giant AI Experiments", endorsed by thought leaders like Elon Musk, Steve Wozniak, Eliezer Yudkowsky, and Yuval Noah Harari, cautioning against unchecked AI progress, warning of potential catastrophes. The letter recommended a six-month halt for the development of safety protocols, aiming to prevent disasters and ensure societal benefits ("Pause Giant AI Experiments," 2023). Likewise, legislators and governments also raised concerns about generative AI. The United Nations Security Council concluded that GenAI could amplify biases, reinforce discrimination, and enhance authoritarian control (*UN Press*, 2023). Given the public concerns regarding generative AI, we believe that its ethical risks in education necessitate special attention.

Proceedings of the 19th Chais Conference for the Study of Innovation and Learning Technologies: Learning in the Digital Era This study revisits AIED Ethics in the era of generative AI. Specifically, we mapped ethical risks after analyzing 14 semi-structured interviews with subject matter experts from various disciplines and countries. The semi-structured interview included eight open-ended questions designed to provide a holistic view of the participants' perspectives regarding GenAIED ethics. Initial thematic analysis reveals several pedagogical, cognitive, emotional, and social ethical risks unique to educational settings, including: GenAIED often focuses on results instead of the process, GenAIED cannot discern truth from false, GenAIED may generate inappropriate content, GenAIED may hinder social skills, and GenAIED may deceive the learner into believing it processes consciousness.

Keywords: Generative AI, AIED, GenAIED, AIED Ethics.

## References

- Floridi, L. (2019). Translating Principles into Practices of Digital Ethics: Five Risks of Being Unethical. *Philosophy & Technology*, 32(2), 185–193. https://doi.org/10.1007/s13347-019-00354-x
- Holmes, W., Porayska-Pomsta, K., Holstein, K., Sutherland, E., Baker, T., Shum, S. B., Santos, O. C., Rodrigo, M. T., Cukurova, M., Bittencourt, I. I., & Koedinger, K. R. (2021). Ethics of AI in Education: Towards a Community-Wide Framework. *International Journal of Artificial Intelligence in Education*. https://doi.org/10.1007/s40593-021-00239-1
- International Community Must Urgently Confront New Reality of Generative, Artificial Intelligence, Speakers Stress as Security Council Debates Risks, Rewards | UN Press. (2023). https://press.un.org/en/2023/sc15359.doc.htm
- Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1(9), Article 9. https://doi.org/10.1038/s42256-019-0088-2
- Nguyen, A., Ngo, H. N., Hong, Y., Dang, B., & Nguyen, B.-P. T. (2023). Ethical principles for artificial intelligence in education. *Education and Information Technologies*, 28(4), 4221–4241. https://doi.org/10.1007/s10639-022-11316-w
- Pause Giant AI Experiments: An Open Letter. (2023). *Future of Life Institute*. https://futureoflife.org/open-letter/pause-giant-ai-experiments/
- Schiff, D. S., & Rosenberg-Kima, R. B. (2023). AI in education: Landscape, vision and critical ethical challenges in the 21st century. In *Handbook of Critical Studies of Artificial Intelligence* (pp. 804–814). Edward Elgar Publishing.
  - https://www.elgaronline.com/edcollchap/book/9781803928562/book-part-9781803928562-81.xml